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MONTHLY REPORT

1 FEBRUARY - 28 FEBRUARY 1958

INSTALLATION AND MAINTENANCE BRANCH

ENGINEERING DIVISION

~~CONFIDENTIAL~~

SUPPLY ACTIVITIES

Requisitions and Property Turn-Ins

1. Ten requisitions, requesting Teletype Spare Parts, were processed for field shipment. The requests were as follows:

- a. [REDACTED] 3 requisitions, 55 items at a cost of \$490.92.
- b. MSB, 7 requisitions, 89 items at a cost of \$825.78.
- c. Total cost \$1,315.80.

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2. In this fiscal year, as of February 25, a total of \$6,791.20 has been expended for Teletype Spare Parts for field use. This total is derived as follows:

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- a. [REDACTED] requested 331 items at a cost of \$2,021.78 and MSB 442 items at a cost of \$4,769.42.

3. Routine requisitions for spare parts were prepared to maintain stock levels for equipment serviced by OC-E/IMB. In this fiscal year, as of February 21, a total of \$25,737.33 has been expended for spare parts.

4. A total of \$8,625.80 has been expended for the month of February on non-expendable equipment. The list of expenditures is as follows:

- a. Test Equipment \$538.00.
- b. Two shelf type telephone booths to be used with the KY-1 telephone set, \$180.00.
- c. Service request to Radio Communications for the installation of 250 ft of coaxial air line cable in the attic of East Building, \$388.90.
- d. One modification kit for a 60 watt station and one 250 watt base station kit including test equipment has been ordered from Motorola at a cost of \$4,093.50.
- e. One complete Teletypewriter Tiny Tot to be installed at the [REDACTED] Contacts Station, \$3,218.00.

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5. Spare parts necessary to convert a Model 14 Transmitter Distributor and a Model 15 page printer from 368. opm. to 420 opm. were ordered. Total cost expended for these parts was \$1,625.30.

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Other Activities

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1. The stock located in Room 141 Curie Hall has been transferred to the Rehab Shop, [REDACTED]. There was a total of 56 line items which have been inventoried and catalogued.

2. Forty five teletype motors are being inspected and identified. These motors will then be returned to stock.

3. Spare parts used by the Electronic Maintenance Section, have been restocked. Location cards were also prepared.

4. Worked with ICB/SD/OL proofreading the Teletype Group (5815) portion of the Agency catalog.

ELECTRONIC MAINTENANCE SECTION

The following installation and maintenance duties were performed by this Section:

Microwave

1. Regular maintenance visits were made to both microwave installations. Minor defects noted were repaired and all equipment tested.

25X1A6a
25X1A

2. Trouble was reported on the Tot Microwave circuit between the Signal Center and [REDACTED]. The trouble proved to be in the C&P Telephone Co. land line between [REDACTED] and the Signal Center.

25X1A5a1

3. Special heat treated silver mica capacitors have been ordered from [REDACTED]. These capacitors will enable us to repair the defective Voice Frequency Carrier Oscillator-Modulators and Discriminator Units. The delivery date for the capacitors has been set at approximately 30 days.

25X1A6d

4. This Agency has accepted the Motorola Broadband R.F. terminal and repeater station equipment offered by the White House Signal Agency. Arrangements are being made to transfer this equipment on a non-reimbursable basis, and to remove the K-386 terminal antenna from its roof top location at [REDACTED] before 1 May 1958.

Washington Disaster Plan

1. Regular maintenance visits were made to [REDACTED] the Attic 25X1A of East Building, and to all mobile cars of the Security Office V.H.F. Net. Minor defects noted were repaired and all equipment tested.

2. The Quick Call unit in the DCI's car is intermittent, but due to the high priority of this car, it could not be released for the service.

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3. The Andrews coaxial air line [REDACTED] has been 25X1A6a
pressurized with dry air, and the cavity resonator tuned up.

4. The Quick Call and Audio levels have been adjusted on the
V.H.F. system.

5. Funds in the amount of \$388.90 have been requested for the
extension of the Andrews coaxial air line from the Attic of East Building
to Room 2 of East Building.

6. The necessary equipment for the conversion of the [REDACTED] 25X1A6a
60 watt Base Station for repeater operation, and the replacement of
the 60 watt VHF Base Station at East Building with a 250 watt repeater
type VHF Base Station, have been ordered [REDACTED] Delivery 25X1A5a1
should be made within 10 to 12 weeks.

8. No decision has been received from [REDACTED] relative to the 25X1A5a1
installation of a second VHF antenna which is to be installed at about
the 200 ft level on the microwave tower at [REDACTED]. 25X1A6a

9. The Motorola V.H.F. Transmitter-Receiver has been removed
from the wrecked Security Office car, FN-1075. This equipment has
been taken to the EMS Shop at [REDACTED] for repairs. 25X1A6a

KY-1 Voice Privacy Units

1. Regular maintenance visits were made to all KY-1 installations.

2. NSA has no further information as to the delivery date of the
modified KY-1 units.

3. The modified KY-1 unit which had been installed in the DCI's
Office for communication with the White House was reported inoperative.
The silicon diodes used in the power supply chassis were defective, thus
blowing the power supply fuse. The peak inverse voltage rating of these
diodes are not of a high enough value for the circuit in which they are
employed. A temporary modification was performed, consisting of the
installation of two additional diodes, which has corrected this situation.
Silicon diodes of the proper inverse voltage rating have been requisitioned.

25X1A

4. The KY-1 unit located at [REDACTED] has been removed and
returned to the EMS Shop for repairs. This unit should be back in
operation by 7 March 1958.

5. Routine maintenance visits to the various KY-1 installations
revealed that six out of the ten KY-1 units were inoperative. No trouble
calls have been received, therefore, we have no idea how many days these
units had been inoperative. To date five units have been repaired.

6. The KY-1 switchboard automatic register readings are as follows:

D/I/P	20 January to 25 February 1958	70
Approved For Release 2001/07/12 : CIA-RDP78-02820A000300050002-1	20 January to 25 February 1958	120
Sig Center	20 January to 25 February 1958	238

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Special Projects

1. One MBU has been reconditioned, but can not be released until instruction manuals, antennas, and various other miscellaneous small parts have been procured.

25X1A6a 2. One 6ST transmitting van and one receiving van is in the process of being reconditioned at the [REDACTED] Shop. In connection with the 6ST equipment, the URT-11 power supplies cannot be completely modified until the required chokes and transformers have been received.

3. The EMS supply of small parts have been inventoried and the card index corrected.

4. All equipment maintained by this section is being inventoried, numbered, and a card index file will be made up on this equipment.

25X1A6a 5. The shop [REDACTED] has been rearranged and surplus equipment has been PTI'd.

MECHANICAL MAINTENANCE SECTION

The following installation and maintenance duties were performed by this Section.

1. Preventative maintenance was performed on all emergency power generators each Friday as scheduled.

2. Inventoried all equipment on Memorandum Receipt from Account 180. Expendable supplies were inventoried, tagged, and placed in bins.

25X1A 3. Rearranged equipment and work benches [REDACTED] 25X1A6a [REDACTED] to better utilize existing floor spaces.

WIRE MAINTENANCE SECTION

25X1A6a 1. The four rack mounted 131B-2 Subscriber sets that had been fabricated by NSA [REDACTED] are now in full operation. Several troubles were encountered in the installation of these units. The installation instructions and drawings were inadequate, broken wires were found, relays were broken and maladjusted, and the 131B-2 Subscriber sets had been radically modified. After we had worked out the installation problems, and the equipment was put into operation, we have encountered no troubles.

2. Two Model 19 teletypewriters were modified for Tiny Tot operation for the Special Signal Center, 1208 "L" Building. As soon as a pickup can be made these machines will be installed.

3. Six (6) Model 19 teletypewriters and six Model 14 reperforators geared to seventy-five words a minute were requested by the Signal Center to be installed at the Manual Cipher Branch. This equipment has been put on order and will be installed when the equipment becomes available.

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4. We have transferred the bulk teletype spare parts from Room 141 Curie Hall to our Rehab Shop [REDACTED] The room is ready for Space Maintenance to start work on making this a secure room. The latest is that work will commence about the first of the month. 25X1A6a

5. This section worked with telecommunications in making up a new drawing of the teletype circuits in the Washington area, [REDACTED] and the Contact Stations. A few errors were found in the new drawing and as soon as these are corrected copies will be run off for all concerned. 25X1A6a

25X1A9a 6. One new man, [REDACTED] came on duty 3 February 1958. He has a very good technical background and since entering on duty has been receiving on the job training in Sig Tot and Tiny Tot maintenance.

25X1A6a Rehab Shop [REDACTED] Warehouse

25X1A6a 1. The three hundred and fourteen (314) line Battery Tap Panel was completed and transferred to [REDACTED]

2. Five Model 51 teletypewriters that had been PTI'd by the Special Signal Center were degreased, overhauled, and put into stock in Class one condition.

3. Twelve UCAB-6 reperforators were degreased, overhauled and made ready for PTI.

4. Eighteen Model 28 printing units and sixteen Model 28 keyboard and base units were degreased and overhauled for PTI. Three Model 28 keyboard and base units are being held for parts. These units had fallen off pallets in warehouse handling, and are in pretty bad shape.

5. Two 131B-2 Subscriber Sets were cleaned up and will be held for future requirements. One Model 15 was cleaned up and will be PTI'd.

25X1A 6. Two days were spent on fixing troubles in the [REDACTED] trailer that came back from tests [REDACTED] The A.C. wiring was found to be shorted and it appeared that a heavy object had fallen on the wire and crushed the insulation. Several adjustments were made on the Tiny Tot and all of the teletype equipment was checked out. 25X1A

25X1A6a 7. Work has started on the fabrication of the 312 line teletype switchboard for [REDACTED] Because of the number of lines involved two racks are being used. The jack strips are mounted in one panel and work on making the cables and internal wiring is ready to start. It is hoped that we will be able to complete this project by the end of March.

Signal Center

1. The tiling of the Signal Center and the Signal Center Maintenance Shop that was started about 15 January was completed on the 13th of February. A great deal of time was spent in moving and rewiring the

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teletype equipment to make room for the tilers.

Everything is back to normal now. Our servicing, which had fallen a week behind, was brought up to date by the end of the month.

2. Two Model 15 teletypewriters used for monitoring at the switchboard, and the Model 15, Model 14 reperforator and Transmitter Distributor used in the Special Signal Center were removed to our REHAB Shop, where they were overhauled and PTI'd to stock.

3. There were one hundred and thirteen minor troubles reported for the month and are broken down as follows:

1. Day Shift	55 troubles
2. Night Shift	47 troubles
3. Outside area (nights)	11 troubles
Total	113 troubles

Outside Area

1. Preventative maintenance was performed on all equipment on this area for the month as per the maintenance schedule.

2. Two Model 15 printing units were overhauled in our Curie Hall Shop for OCI.

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3. A Model 28 teletypewriter operating at seventy-five words per minute was installed at [REDACTED] This machine is being used for some type of intercept traffic.

4. There were fifteen troubles reported and cleared for the month, and they are broken down as follows:

25X1C

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OCI	9 troubles
[REDACTED]	4 troubles
[REDACTED]	2 troubles

5. A successful two hour test was run on the one hundred word per minute Model 28 at the R & S Building used for the Communications exhibit.

1717 "H" Street

25X1A6a

1. Due to difficulties encountered in the installation of the rack mounted 131B-2 Subscriber Sets [REDACTED] we are about a week behind schedule in servicing. We should be up to date with the servicing in a few days.

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25X1A6a 2. As a result of the installation of two full duplex rack mounted 131B-2 Subscriber sets [REDACTED] we were able to remove three 131B-2 Subscriber sets and one Model 19 teletypewriter.

STATSPEC 3. When the UCAB-6 was installed at [REDACTED] Room 436, 1717 "H" St. all of the reperforators were equipped with the series-governed motors. This month we replaced all of the series motors with synchronous motors.

STATSPEC 4. Two [REDACTED] teletype channels, 41-GC-546 and 41-GC-547 were installed. These channels are the new send and receive circuits to 25X1A6a [REDACTED] allocated circuits through the [REDACTED] Facilities control. 25X1A

25X1A6a 5. Nineteen troubles were reported and cleared for the month. Thirteen troubles at [REDACTED] and six troubles [REDACTED] STATSPEC

ADMINISTRATIVE

ECD

25X1A9a

10 February 1958
17 February 1958
3 February 1958

RESIGNATIONS

Not Applicable

TRANSFERS

Not Applicable

PCS

25X1A9a

25X1A6a

PROCESSING PCS

25X1A9a

25X1A6a

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TDY

25X1A9a



California	3 Feb. - 17 Feb. 1958
California	3 Feb. - 17 Feb. 1958
Ft. Meade	3 Feb. - 28 Feb. 1958
NSA	1 Feb. - 24 Feb. 1958

On-the-Job Training

25X1A9a



128 hrs.	Wire Maintenance Training
16 hrs.	Electronic Maintenance Training
120 hrs.	Electronic Maintenance Training
160 hrs.	Electronic Maintenance Training
160 hrs.	Electronic Maintenance Training
160 hrs.	Electronic Maintenance Training
16 hrs.	Electronic Maintenance Training
160 hrs.	Electronic Maintenance Training
72 hrs.	Electronic Maintenance Training

OVERTIME

The Installation and Maintenance Branch performed twenty hour and one half hours of Overtime this monthly report period.

The Mechanical Maintenance Section required no overtime this month.

The Electronic Maintenance Section required no overtime this month.

The Wire Maintenance Section required 24 and $\frac{1}{2}$ hours overtime this monthly report period to take care of emergency trouble calls in the Signal Center and outside area.



25X1A9a

Chief, Installation and Maintenance Branch

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